

**FOOD
TECH
MASTER**

PAVAN SCHOOL OF
FOOD TECHNOLOGIES

MAINTENANCE MANAGEMENT

14th -18th October 2019
Galliera Veneta - Padua - Italy



The **Food Tech Master**
is a series of courses by

Pavan
PASTA AND EXTRUDING TECHNOLOGIES

**PROFESSIONAL TRAINING
COURSE IN:**

MAINTENANCE MANAGEMENT



**Boost your career and become a master in
food production technology**



Our courses are developed on the basis of four key elements:

LEARN

each lecture is developed by and for specialists in food processing;

INTERACT

get in touch with the most advanced technology and the most accredited professionals;

SHARE

a valuable networking opportunity with professionals in food manufacturers;

GROW

become a Food Tech Master and bring with you more in-depth knowledge.

**UPGRADE YOUR SKILLS,
BECOME A FOOD TECH MASTER!**



Sharing expertise

The FOODTECHMASTER is a series of professional training courses organized by Pavan with the aim of sharing knowledge and expertise on food production technology. The next edition will take place in October 2019 and will focus on maintenance techniques. The seminars will be held by experts from the world of industrial maintenance and Pavan Process Engineers.

Complete training

The maintenance of industrial plants is an increasingly strategic asset: the efficiency and productivity of the entire supply chain depend on it! Thanks to the intervention of highly competent and specialized technicians, this course will allow you to learn and experience the most advanced techniques to manage the maintenance of the plants, in particular for the production of dry pasta and extruded products. It will deal not only with the best practices for a correct ordinary maintenance, but also with the most advanced solutions that allow to intervene preventively on the plant to

Duration

5 Days: 14 - 18 October 2019

Arrival: 13 October 2019 evening

Departure: 18 October 2019 afternoon

Pick-up: Treviso Airport, Venice Airport, Padua Train Station

Venue

Pavan Conference Centre

Pavan Group Headquarters, Galliera Veneta (Padua), Italy

Contents

The seminar will focus on:

- > Big Data for a manufacturing 4.0.
- > Predictive maintenance techniques: meaning, objectives, application mode, cost/benefit analysis;
- > Maintenance management: programming; document management; preventive, predictive and proactive maintenance application; warehouse management; KPIs
- > Maintenance of pasta production plants.

guarantee its good functioning in time, avoiding production interruptions or drops in performance. A proper maintenance therefore means a reduction in overall management costs and fewer operating problems.

The presentations will be complemented by practical examples thanks to the collaboration with Pastificio Campioni (Italy), a high-tech pasta factory exclusively equipped with Pavan lines, which has allowed us to carry out complete and detailed technical investigations.

Target

Creating a common base of technological and technical know-how among machinery operators with reference to:

Plant Managers, Production Managers, R&D Managers, Quality Control Managers, Production Engineers

Language

English

The course may be available in other languages depending on the total number of applicants for a given language.



Value

- > 40 hours of classes
- > attendance to all training sessions
- > trials, sensory tests
- > access to all presentations
- > proceedings articles

Accommodation

- > Hotel la Filanda - Cittadella (Padova)
www.hotelfilanda.it
- > Distance from Pavan Headquarters: 5 km, 5 minutes by car/coach.

Transfer

- > from/to Venice Airport;
- > daily transfers from hotel to Pavan Headquarters and back;
- > transfers in the evening for dinner, when necessary

Certificate

- > Certificate of Food Tech Master status

Meals

- > Breakfast
- > Coffee break
- > Lunch
- > Dinner

After work

- > Guided city tours in the evening
(tours may be cancelled in case of bad weather)

- > The course package includes mentioned services from Sunday, October 13rd evening and to Friday, October 18th afternoon.
- > Pavan recommend to attend the entire course and will not refund any fees for absence, late arrival and early departure.

Subscription

Visit our [EVENTBRITE](#) page to book your seat for this course and discover more about fees and discounts.

Registration is open until 30/09/2019.

> <https://ftm-maintenance-2019.eventbrite.it>



The program and the topics of the courses may be subject to change.

October

14

Maintenance of food processing plants

DAY ONE

October 14th, Monday

Timetable

08:45 Meeting at Hotel Lobby for transfer at Pavan

09:00 Maintenance management

Luca Girelli

Contents

- Defining goals to be achieved based on weak points and maintenance requirements
- Documents management
- Programming routine and extraordinary maintenance and related inspections
- Preventive maintenance
- Predictive maintenance
- Proactive maintenance
- Spare parts and stock management
- The role of staff training in skills development
- Adopting system to measure the effectiveness and key indicators: maintenance KPIs
- Q&A

10:30 Coffee break

12:45 Lunch

15:45 Coffee break

16:00 Function, calibration and maintenance of dough level probes and flow meters

Andrea Spadacini
Francesco Fico
Endress+Hauser Italia

17.30 End of lectures and transfer to the hotel



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October

15

Maintenance of food processing plants

DAY TWO

October 15h, Tuesday

Timetable

08:45 Meeting at Hotel Lobby for transfer at Pavan

09:00 Predictive maintenance techniques

Luca Girelli

Contents

- Overview on different maintenance concepts
- Introduction on predictive maintenance
- Vibration analysis
- Lubricants analysis
- Infrared thermography
- Ultrasound analysis
- Analysis of electric motors
- Non-destructive test techniques
- Practical application exercises
- Maintenance self-diagnostics
- How to draw up a cost/benefit analysis
- Q&A

10:30 Coffee break

12:45 Lunch

15:45 Coffee break

16:00 Function, calibration and maintenance of Rotronic probes

Giorgio Grandi
Michell Instruments

17.30 End of lectures and transfer to the hotel



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October

16

Maintenance of food processing plants

DAY THREE

October 16th, Wednesday

Timetable

08:45 Meeting at Hotel Lobby for transfer at Pavan

09:00 Big Data for a manufacturing 4.0

Veronica Brizzi

Contents

- Data analysis to assess process quality
- Using data to create a baseline of reference
- Analysis of the variable(s) that identify the quality of the process
- Identification of the parameters that influence the value of the variables of the first point - correlation matrix
- Definition of the process to be evaluated
- Implementation of a predictive model for the evaluation of the defined variable and validation
- Identification of periods with efficient or less efficient behavior based on data history
- Data analysis to evaluate machine downtime
- How to collect data from machines and how to analyse them
- What infrastructures are needed to collect data from machines, analyse and valorise them
- How to analyze production process variables to develop quality or performance predictive analysis
- How to evaluate internal capabilities
- What infrastructure, equipment and resources are needed?
- How to find the necessary external capabilities
- Specific examples in the food production sector

10:30 Coffee break

12:45 Lunch

15:00 Efficiency and maintenance of centrifugal pumps:
how to choose a centrifugal pump, typical curves of a pump,
behavior at starting, operating and adjustment status,
maintenance and troubleshooting

KSB Pumps

16:00 Coffee break

16:30 Practical experiences on the management of maintenance techniques

Andrea Bertini
GEA

17.30 End of lectures and transfer to the hotel



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October

17

Maintenance of food processing plants

DAY FOUR

October 17th, Thursday

Timetable

08:45 Meeting at Hotel Lobby for transfer at Pavan

09:00 Big Data for a manufacturing 4.0

Veronica Brizzi

Contents

- Data analysis to assess process quality
- Using data to create a baseline of reference
- Analysis of the variable(s) that identify the quality of the process
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- Identification of periods with efficient or less efficient behavior based on data history
- Data analysis to evaluate machine downtime
- How to collect data from machines and how to analyse them
- What infrastructures are needed to collect data from machines, analyse and valorise them
- How to analyze production process variables to develop quality or performance predictive analysis
- How to evaluate internal capabilities
- What infrastructure, equipment and resources are needed?
- How to find the necessary external capabilities
- Specific examples in the food production sector

10:30 Coffee break

12:45 Lunch

15:00 Tribology techniques Gear oil lubrication, bearings lubrication, selecting the correct gear oil, replacing oil and grease.

Stefano Bianchi
Kluber

16:00 Coffee break

17.30 End of lectures and transfer to the hotel



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October

18

Maintenance of food processing plants

DAY FIVE

October 18th, Friday

Timetable

08:45	Meeting at Hotel Lobby for transfer at Pavan	
09:00	Routine and extraordinary maintenance of dry pasta production lines	Roberto Chimetto Antonio Liviero Pavan
10:30	Coffee break	
12:45	Lunch	
15:45	Coffee break	
17.30	Feedback and certificates	

Contents

- Data analysis to assess process quality
- Using data to create a baseline of reference
- Analysis of the variable(s) that identify the quality of the process
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